

Unit 5 Worksheet 5 Review

Period _____ Date _____

1.) Find an example segment for each in $\triangle ABC$ if $\overline{AD} \cong \overline{DB}$, $\overline{CE} \cong \overline{EB}$, and $\angle DBG \cong \angle EBG$.

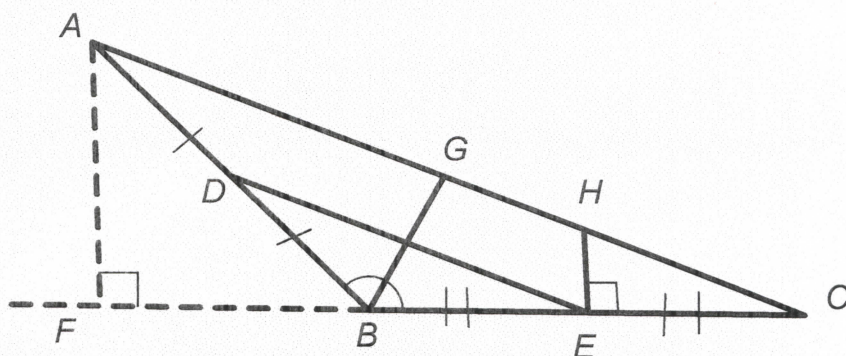
Perpendicular Bisector \overline{HE}

Median _____

Altitude \overline{AF}

Angle Bisector \overline{BG}

Midsegment \overline{DE}

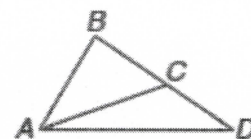


For numbers 2 & 3, determine which of the statements would be true given the picture at the right.

2.) \overline{AC} is a median.

A. $m\angle ACD = 90$ C. $BC = CD$

B. $\angle BAC \cong \angle DAC$ D. $\angle B \cong \angle D$



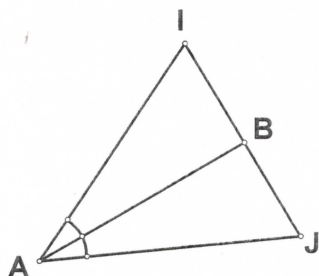
3.) \overline{AC} is an angle bisector.

F. $m\angle ACD = 90$ G. $\angle BAC \cong \angle DAC$ H. $BC = CD$

J. $\angle B \cong \angle D$

Identify the following segment as an angle bisector, median, perpendicular bisector, or altitude and then give the congruent parts or right angles.

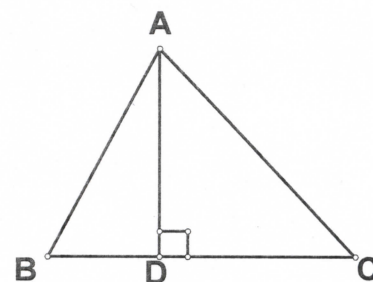
4.)



\overline{AB} is \angle BISECTOR

$\angle IAB \cong \angle BAJ$

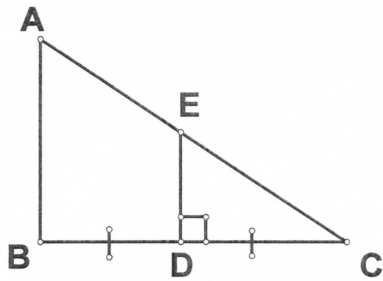
5.)



\overline{AD} is ALTITUDE

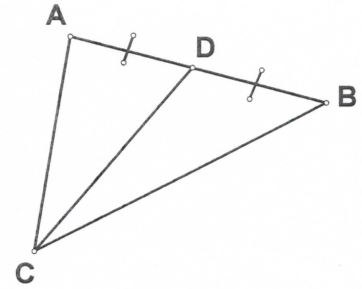
$\angle ADC \cong \angle ADB \rightarrow$ RIGHT ANGLES

6.)



\overline{ED} is \perp BISECTOR
 $\overline{BD} \cong \overline{DC}$ $\angle EDC \cong \angle EDT$ RIGHT ANGLES

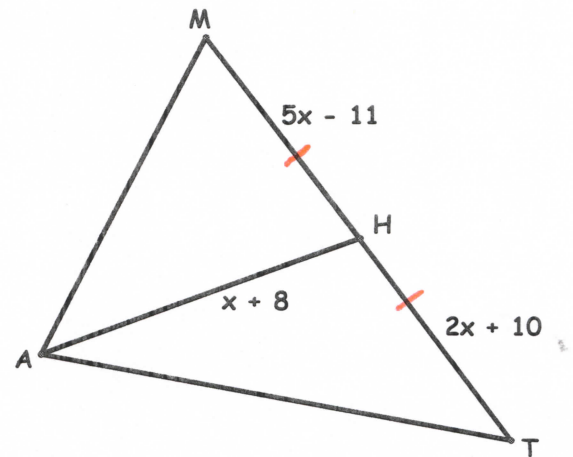
7.)



\overline{CD} is MEDIAN $\overline{AD} \cong \overline{DB}$

8.) \overline{AH} is a median of $\triangle MAT$. Solve for x , using the information as marked.

$$\begin{aligned} MH &= HT \\ 5x - 11 &= 2x + 10 \\ 3x - 11 &= 10 \\ 3x &= 21 \\ x &= 7 \end{aligned}$$



9.) Given the diagram where points D, H, and K are the midpoints of the sides of the $\triangle EGF$:

If $DK = 10x$ and $GF = 15x + 20$ find:

$x =$ 4

$DK =$ 40

$GF =$ 80

$$\begin{aligned} GF &= 2(DK) \\ 15x + 20 &= 2(10x) \\ 15x + 20 &= 20x \\ 20 &= 5x \\ 4 &= x \end{aligned}$$

